PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new traffic control signal at the intersection of MD 152 and Singer Road in Harford County, Maryland. MD 152 is considered to run in an north/south direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA four (4) phase, full-traffic-actuated mode. There will be an exclusive/permissive left turn phase for the southbound movement of MD 152. The MD 152 through movements will operate concurrently. The Singer Road movements will operate alone. The residential D/W opposite Singer Road shall have a steady red indication while MD 152 has the ROW. It shall have a flashing red indication which operates concurrently with Singer Road.

An eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, one 4-channel rack mounted time delay output loop detector amplifier, and video detection interface equipment housed in a base mounted cabinet are to be installed at this location.

CONTACT LIST

The contact persons for District #4 are as follows:

Mr. Randall Scott
Assistant District Engineer - Traffic
410-321-2800

Mr. Joseph McMahon
Assistant District Engineer - Utility
410-321-2800

Mr. Dave Ramsey
Assistant District Engineer - Maintenance
410-321-2800

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

The Power Company Representative is:
Steve Schneider
Baltimore Gas and Electric Company
7317 Parkway Drive South
Hanover, Maryland 21067
410-859-9030

WMS # 868102

EQUIPMENT LIST

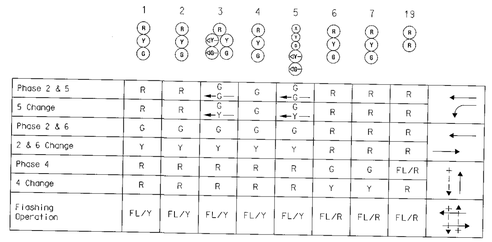
A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel mast arm pole with 70 ft. mast arm
1	EA	818	16 ft. steel pedestal pole with breakaway transformer base.
1	EA	816	Standard S.H.A. traffic signal controller, base mounted cabinet, one 4-channel loop detector amplifier, and video detection interface equipment [Note: Controller and cabinet shall be purchased from Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650].
3	EA	---	Video Detection Camera (to include detector cable). [three - 150 LF cables]
5	EA	814	12 in., one-way, three section (R,Y,G) polycarbonate adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in., one-way, five section (R,Y,YA,G,GA) polycarbonate adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	8 in./12 in., one-way, five section (8 in. R,Y,G, 12 in. YA,GA) adjustable traffic signal head with post top mounting hardware and tunnel visors.
1	EA	814	8 in., one-way, two section (R,R) adjustable traffic signal head with pole mounting hardware and tunnel visors.
2	EA	813	48 in. x 48 in. W 3-3 "NEW" sign for ground mounting.
2	EA	813	16 in. X Var. D-3(1) [Bk on Yell] sign for ground mounting.
1	EA	813	36 in. x 36 in. W 3-3 "NEW" sign for ground mounting.
1	EA	813	16 in. X Var. D-3(1) [Gr on Wht] (Dual Faced) sign with under mast arm hardware.
1	EA	813	36 in. x 42 in. R10-12 sign with mast arm mounting hardware.
1	EA	813	30 in. x 51 in. Shield Assembly for pole mounting.
1	EA	813	48 in. x 75 in. Shield Assembly for ground mounting.
1	EA	806	15 ft. luminaire arm.
1	EA	806	250 W H.P.S. lamp and luminaire.
2	EA	---	Non-Invasive Microloop probe (set of three) with 500 ft. lead-in cable.

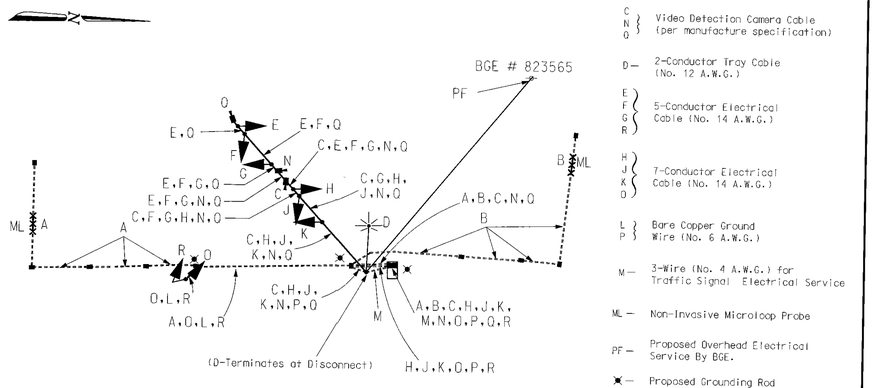
B. Equipment to be furnished and installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
2	CY	205	Test pit excavation.
10	EA	811	Handhole.
40	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
210	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
400	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
40	LF	810	3-wire (No. 4 A.W.G.) electrical cable.
120	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
775	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
50	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
10	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
180	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
30	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
6.6	CY	801	Concrete foundation for traffic signal equipment.
3	EA	804	Ground rod - ¾ in. diameter x 10 ft. length.
1	EA	807	Control and distribution equipment (120/240 V, one phase, three wire system) for a type B-8 overhead electrical service.
75	LF	556	24 in. wide HAPPTPM - white for stop line.
110	LF	812	4 in. x 6 in. wood sign support.
2	EA	---	Remove existing ground mounted sign.
Lump Sum	LS	---	As-built for S.H.A. [on CADD].

Phase Chart



Wiring Diagram



The Traffic Group
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APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
MD 152 (Mountain Road) at Singer Road

DRAWN BY:	Frank Hoecker	F.A.P. NO.	N/A	TS NO. 4183-GI	SHEET NO. 2 OF 2
CHECKED BY:		S.H.A. NO.	BW996M82		
SCALE:	N/A	COUNTY:	Harford	T.I.M.S. NO. F-261	
DATE:	August 6,, 2002	LOG MILE:	12015205.24		

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